scientific information, the interdisciplinary team shall estimate the effects of changes in vegetation type, timber age classes, community composition, rotation age, and year-long suitability of habitat related to mobility of management indicator species. Where appropriate, measures to mitigate adverse effects shall be prescribed.

(2) Planning alternatives shall be stated and evaluated in terms of both amount and quality of habitat and of animal population trends of the management indicator species.

- (3) Biologists from State fish and wildlife agencies and other Federal agencies shall be consulted in order to coordinate planning for fish and wildlife, including opportunities for the reintroduction of extirpated species.
- (4) Access and dispersal problems of hunting, fishing, and other visitor uses shall be considered.
- (5) The effects of pest and fire management on fish and wildlife populations shall be considered.
- (6) Population trends of the management indicator species will be monitored and relationships to habitat changes determined. This monitoring will be done in cooperation with State fish and wildlife agencies, to the extent practicable.
- (7) Habitat determined to be critical for threatened and endangered species shall be identified, and measures shall be prescribed to prevent the destruction or adverse modification of such habitat. Objectives shall be determined for threatened and endangered species that shall provide for, where possible, their removal from listing as threatened and endangered species through appropriate conservation measures, including the designation of special areas to meet the protection and management needs of such species.

§219.20 Grazing resource.

In forest planning, the suitability and potential capability of National Forest System lands for producing forage for grazing animals and for providing habitat for management indicator species shall be determined as provided in paragraphs (a) and (b) of this section. Lands so identified shall be managed in accordance with direction established in forest plans.

- (a) Lands suitable for grazing and browsing shall be identified and their condition and trend shall be determined. The present and potential supply of forage for livestock, wild and free-roaming horses and burros, and the capability of these lands to produce suitable food and cover for selected wildlife species shall be estimated. The use of forage by grazing and browsing animals will be estimated. Lands in less than satisfactory condition shall be identified and appropriate action planned for their restoration.
- (b) Alternative range management prescriptions shall consider grazing systems and the facilities necessary to implement them; land treatment and vegetation manipulation practices; and evaluation of pest problems; possible conflict or beneficial interactions among livestock, wild free-roaming horses and burros and wild animal populations, and methods of regulating these; direction for rehabilitation of ranges in unsatisfactory condition; and comparative cost efficiency of the prescriptions.

§219.21 Recreation resource.

To the degree consistent with needs and demands for all major resources, a broad spectrum of forest and rangeland related outdoor recreation opportunities shall be provided for in each alternative. Planning activities to achieve this shall be in accordance with national and regional direction and procedural requirements of paragraphs (a) through (g) of this section.

- (a) Forest planning shall identify—
- (1) The physical and biological characteristics that make land suitable for recreation opportunities;
- (2) The recreational preferences of user groups and the settings needed to provide quality recreation opportunities; and
- (3) Recreation opportunities on the National Forest System lands.
- (b) The supply of developed recreational facilities in the area of National Forest influence shall be appraised for adequacy to meet present and future demands.
- (c) Planning alternatives shall include consideration of establishment of physical facilities, regulation of use,

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and recreation opportunities responsive to current and anticipated user demands.

- (d) In formulation and analysis of alternatives as specified in §219.12 (f) and (g), interactions among recreation opportunities and other multiple uses shall be examined. This examination shall consider the impacts of the proposed recreation activities on other uses and values and the impacts of other uses and activities associated with them on recreation opportunities, activities, and quality of experience.
- (e) Formulation and evaluation of alternatives under paragraphs (c) and (d) of this section shall be coordinated to the extent feasible with present and proposed recreation activities of local and State land use or outdoor recreation plans, particularly the State Comprehensive Outdoor Recreation Plan, and recreation opportunities already present and available on other public and private lands, with the aim of reducing duplication in meeting recreation demands.
- (f) The visual resource shall be inventoried and evaluated as an integrated part of evaluating alternatives in the forest planning process, addressing both the landscape's visual attractiveness and the public's visual expectation. Management prescriptions for definitive land areas of the forest shall include visual quality objectives.
- (g) Off-road vehicle use shall be planned and implemented to protect land and other resources, promote public safety, and minimize conflicts with other uses of the National Forest System lands. Forest planning shall evaluate the potential effects of vehicle use off roads and, on the basis of the requirements of 36 CFR part 295 of this chapter, classify areas and trails of National Forest System lands as to whether or not off-road vehicle use may be permitted.

§219.22 Mineral resource.

Mineral exploration and development in the planning area shall be considered in the management of renewable resources. The following shall be recognized to the extent practicable in forest planning:

(a) Active mines within the area of land covered by the forest plan;

- (b) Outstanding or reserved mineral rights;
- (c) The probable occurrence of various minerals, including locatable, leasable, and common variety;
- (d) The potential for future mineral development and potential need for withdrawal of areas from development;
- (e) Access requirements for mineral exploration and development; and
- (f) The probable effect of renewable resource prescriptions and management direction on mineral resources and activities, including exploration and development.

§219.23 Water and soil resource.

Forest planning shall provide for-

(a) General estimates of current water uses, both consumptive and nonconsumptive, including instream flow requirements within the area of land covered by the forest plan;

(b) Identification of significant existing impoundments, transmission facilities, wells, and other man-made developments on the area of land covered by the forest plan;

(c) Estimation of the probable occurrence of various levels of water volumes, including extreme events which would have a major impact on the planning area;

(d) Compliance with requirements of the Clean Water Act, the Safe Drinking Water Act, and all substantive and procedural requirements of Federal, State, and local governmental bodies with respect to the provision of public water systems and the disposal of waste

- (e) Evaluation of existing or potential watershed conditions that will influence soil productivity, water yield, water pollution, or hazardous events; and
- (f) Adoption of measures, as directed in applicable Executive orders, to minimize risk of flood loss, to restore and preserve floodplain values, and to protect wetlands.

§ 219.24 Cultural and historic resources.

Forest planning shall provide for the identification, protection, interpretation, and management of significant cultural resources on National Forest System lands. Planning of the resource